# Return Rates and Outcomes from Ethnicity-Specific Mental Health Programs in Los Angeles

# ABSTRACT

Objectives. The present study compared the return rate, length of treatment, and treatment outcome of ethnic minority adults who received services from ethnicity-specific or mainstream programs.

Methods. The sample consisted of 1516 African Americans, 1888 Asian Americans, and 1306 Mexican Americans who used 1 of 36 predominantly White (mainstream) or 18 ethnicity-specific mental health centers in Los Angeles County over a 6-year period. Predictor variables included type of program (ethnicity specific vs mainstream), disorder, ethnic match (whether or not clients had a therapist of the same ethnicity), gender, age, and Medi-Cal eligibility. The criterion variables were return after one session, total number of sessions, and treatment out-

Results. The study indicated that ethnic clients who attended ethnicity-specific programs had a higher return rate and stayed in the treatment longer than those using mainstream services. The data analyses were less clear cut when treatment outcome was examined.

Conclusions. The findings support the notion that ethnicity-specific programs seem to increase the continued use of mental health services among ethnic minority groups. (Am J Public Health. 1995;85:638–643)

David T. Takeuchi, PhD, Stanley Sue, PhD, and May Yeh, MA

#### Introduction

Intense debate has ensued over whether race-specific policies and programs are appropriate in facilitating social, political, and economic reforms in the United States.1 Frequently heard are arguments about the value of having programs or policies that are unique to an ethnic minority group rather than applicable to all groups, including Whites. In the mental health field, some investigators have advocated for ethnicity-specific mental health programs and services, 2,3 particularly because of the many problems that have been identified in the proper assessment of psychopathology and the delivery of psychotherapeutic services to ethnic minority populations.4-13 These programs are specifically designed to serve certain ethnic minority populations and are based in hospitals, clinics, or mental health centers.

Conceptually, ethnicity-specific mental health programs are thought to provide a better match or fit between interventions and the cultural backgrounds and life-styles of ethnic minority clients. 14,15 They typically involve the recruitment of ethnic personnel, modifications in treatment practices that are presumably more culturally appropriate, and development of an atmosphere in which services are provided in a culturally familiar context. Most are located in communities with relatively large ethnic populations and serve a predominantly ethnic clientele.<sup>3</sup> Over the years, many ethnicity-specific programs have been created, particularly in communities with large ethnic populations. Despite the enthusiasm for these programs, the basic questions of whether ethnicity-specific mental health programs are beneficial to ethnic minority clients or society in general and, even more fundamentally, what happens in these programs have been virtually unexplored.16 No large-scale empirical investigations have examined these questions or the issue of what program features are related to service use and treatment outcomes. Such studies are needed, not only to shed light on directions for public policies and programs but also to eventually identify components of ethnicity-specific services that are associated with therapeutic effectiveness. The present study compared the effects of ethnicity-specific programs with those of mainstream mental health services for three different ethnic groups: African Americans, Asian Americans, and Mexican Americans. The study was based on an extremely large data set from the largest local community mental health system in the nation. Our major purpose was to compare ethnic minority adults who enter ethnicity-specific programs with their counterparts who enter mainstream programs in terms of return rate, length of treatment, and treatment outcome.

#### Methods

Data

Data for the study were supplied by the Automated Information System, maintained by the Los Angeles County Department of Mental Health. The county uniformly verifies information related to financial matters. In order to ensure that other data were comparable in quality, we spent 6 months cleaning the data set. Data cleaning required cross checking the

The authors are with the University of California, Los Angeles.

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Requests for reprints should be sent to David T. Takeuchi, NPI 88-201, Department of Psychiatry and Biobehavioral Sciences, University of California, Los Angeles, CA 90024.

data to ensure consistency of information (e.g., correspondence of age and birth date), range checking to ensure that codes were within the field of responses for a particular item, and checking for omission of duplicate cases. The data were eventually placed into a Statistical Analysis System format for use in data analyses. Although reliability and validity are difficult to assess with secondary data drawn from treatment records, these types of data have proven useful in the past in exploring minority mental health issues in geographic settings other than Los Angeles. 17-21

# Sample

This study was limited to minority adults 18 years of age and older who used services at a mental health facility in Los Angeles County between September 1, 1982, and December 31, 1988. The original data set was restricted to this period because of inconsistent data definitions and diagnostic criteria for disorders in earlier years. Because the total population of adults entering the mental health system during the study time period was quite large (more than 100 000 cases or episodes), sampling was initiated to make the data set more manageable. All Asian Americans were included in the initial sampling plan because they constituted only a fraction of the total client population. For the other three ethnic groups, a random quota sample stratified by age was selected. The total number of African American, White, and Mexican American adults sampled each roughly matched the total for Asian Americans. A similar number of episodes (adults) from each ethnic group was randomly drawn from the original data set.

We selected only adults who entered an outpatient setting that served a predominantly ethnic population or a program that served a predominantly White clientele. Programs meeting two criteria were used in defining an ethnicity-specific or mainstream organization. First, only programs that admitted an average of 75 or more new patients with unduplicated cases per year during the study time period were selected. Since the data set also included individual mental health professionals who provided services in Los Angeles County and who were not affiliated with an agency, the size criterion allowed us to focus on organizations. The inclusion of individual professionals or group practices could reduce the odds that the effects uncovered in the following analyses were due to the talents of a few

therapists. Indeed, a check of the final list of providers indicates that this criterion did eliminate individual therapists or small group practices. The criterion of 75 episodes also represented a convenient cutoff. Of the 172 providers examined during this time period, only 4 averaged between 50 and 74 cases (most averaged either 75 or more episodes a year or less than 50 episodes a year). None of these 4 met the second definition of an ethnicity-specific or mainstream organization.

Second, an ethnicity-specific or mainstream program was operationally defined on the basis of its ethnic composition. A program with a majority (more than 50%) of clients from a specific minority group (e.g., Asian, Black, Mexican) was classified as ethnic specific or ethnic. If a majority of a program's clients were White, then the program was considered mainstream. Programs that did not have a majority of either Whites or a specific minority group (n = 20) were eliminated from the present analysis. A total of 54 programs-36 mainstream and 18 ethnicity specific (8 African American, 5 Mexican American, and 5 Asian American) met both criteria. Ethnicity-specific programs did not differ markedly from mainstream programs in terms of the average number of clients served during the period of the study.

The following groups were also excluded from the data set: (1) adults who used only inpatient services, continuous care, day treatment, or emergency services; (2) American Indians and non-Mexican Hispanics (e.g., mainland Puerto Ricans), because of their relatively small client populations; (3) clients who came into clinics for assessment purposes only; and (4) clients with cases still considered open. Adults who used only inpatient services were excluded because there were too few ethnicity-specific units to compare across ethnic minority groups. The unit of analysis for this study was confined to the first episode during the study time period. Episodes beyond the first entry were excluded to reduce the possibility of having clients who could possibly be biased by repeated experiences in the mental health system over the period of the study. Of course, taking the first entry does not entirely eliminate adults who may have entered prior to the cutoff for our study time period. Nonetheless, the data set was limited to unduplicated cases during this time. After all of the exclusions had been made, the final sample sizes for minority clients who had complete data were as follows: African Americans, 1516; Asian Americans, 1888; and Mexican Americans, 1306.

#### Measures

The effects of ethnicity-specific programs were assessed on three dependent measures: continuation in services, total number of treatment sessions, and rating on the Global Assessment Scale, Continuation was defined as a return for treatment after 1 session. Although continuation or return (the opposite term is premature termination) can be defined in many ways and clients may improve even if they drop out of treatment, this definition makes intuitive sense since the first session represents the adult's initial contact with the mental health program. Only client-initiated dropouts were included in this study; thus, failure to return after 1 session may have reflected a dissatisfaction with services or the client's (and family's) perception that the goals for treatment were met despite the mental health professional's sense that treatment should have continued. Furthermore, the use of 1 session allowed us to directly compare our results with those obtained by O'Sullivan et al.,21 Sue,3 and Sue et al.,22 who also used 1 session as the criterion. Total number of sessions was calculated for those clients who either terminated or completed treatment. Log transformations were performed on the actual numbers of sessions, since some clients attended well over 100, creating positively skewed distributions. Clients who dropped out of treatment after 1 session (from 11% to 19% of clients, depending on ethnicity) were excluded from the treatment outcome analysis.

The Global Assessment Scale provides a rating of clients' overall psychological, social, and occupational functioning. Therapists perform the ratings on a 100-point scale, with 1 indicating the most severe impairment and 100 referring to good functioning in all areas of life. The instrument is highly similar to the Global Assessment of Functioning scale used on Axis V of the Diagnostic and Statistical Manual of Mental Disorders (revised third edition).23 Reliability of the Global Assessment Scale has been found to be high.24 Holcomb and Otto<sup>25</sup> have questioned its validity, while Sohlberg found it to have good concurrent and predictive validity.26

The following client characteristics were entered as control variables in the multivariate analyses: gender, age, Medi-Cal eligibility, and diagnosis. Age was a continuous variable representing the client's age at the time of admission to the

TABLE 1—Characteristics of Mainstream and Ethnicity-Specific Mental Health Clinics

	African Americans		Asian Americans		Mexican Americans	
	Mainstream	Ethnicity Specific	Mainstream	Ethnicity Specific	Mainstream	Ethnicity Specific
Total sample	664	852	1260	628	965	341
Male. %	50	45*	43	40	43	36*
Eligible for Medi-Cal, %	81	84	72	72	75	69*
Client age, y, mean (SD)	34 (12)	35* (13)	33 (12)	38** (14)	34 (14)	35 (14)
Seriously mentally ill, %	54	44**	<b>`53</b>	43** ´	<b>41</b> ′	14**
Ethnic match, %	17	70**	11	72**	30	58**
Admission Global Assessment Scale rating, mean (SD)	35 (16)	47** (13)	37 (16)	44** (10)	39 (15)	49** (10)
Log of total sessions, mean (SD)	1.1 (1.1)	1.4** (1.2)	1.2 (1.2)	2.4** (1.1)	1.2 (1.1)	2.1** (1.1)
Discharge Global Assessment Scale rating, mean (SD)	46 (16)	50** (13)	46 (16) <sup>′</sup>	49** (14)	50 (14)	54** (11) <sup>′</sup>
Return rate, %	60	77**	64	98**	68	97**

Note. Mainstream programs represent those in which 50% or more of the clients are White; ethnicity-specific programs represent those in which 50% or more of the clients are from the specified minority group. Statistical comparisons were made between mainstream and ethnicity-specific programs within each minority group. \* $P \le .05$ ; \*\* $P \le .001$ .

outpatient clinic. Medi-Cal eligibility was determined by the amount of gross family income adjusted for the number of dependents in the household. Among those eligible for Medi-Cal, the state of California helps to pay for their use of health and mental health services. Finally, as a gross means of controlling for disorders, clients were divided into those who were diagnosed with a disorder with psychotic features (serious mental illness) and those who were diagnosed as not having such a disorder (nonserious mental illness).

It is plausible that the impact of ethnicity-specific programs is due entirely to the ethnic match between client and therapist. That is, programs that serve a large number of minorities are more likely to hire ethnic therapists. Thus, the likelihood of the client seeing an ethnic therapist is greater than in a mainstream program. Sue et al. have previously shown that when clients and therapists are matched on ethnicity, the results are generally more favorable than when clients see therapists from a different ethnic group.<sup>22</sup> Ethnic match referred to whether or not the therapist was of the same ethnicity as the client. A Black therapist-Black client dyad or Chinese therapist-Chinese client dyad was considered a match. However, among Asian Americans, a Chinese therapist-Japanese client was not a match. We recognize that ethnic match may be confounded with the issue of language preferences or the ability of a therapist to communicate with the client. Because of the limitations of the data, we could not fully explore this issue. However, a previous study did document that both types of matches (ethnic and language) were highly associated with use of services for Asian Americans and Mexican Americans, especially non-English speakers.22 Accordingly, we included ethnic match as a control variable to examine the effect of ethnicity-specific programs over and above the effects of ethnic match.

## Results

#### Characteristics of Clients

Table 1 displays some characteristics available of adults who entered each type of program. Generally, those eligible for Medi-Cal were more likely to use community mental health services. A substantial majority of the adults who used either ethnicity-specific or mainstream programs were eligible for Medi-Cal. The proportion of those eligible for Medi-Cal did not vary between mainstream and ethnicityspecific programs among African Americans and Asian Americans. Among Mexican Americans, however, a greater proportion of those eligible for Medi-Cal were likely to enter mainstream programs (75%) than ethnicity-specific programs (69%). In all three minority groups, mainstream programs served a larger proportion of more severely disturbed clients than ethnicity-specific programs. The most striking difference occurred among Mexican Americans, where the proportion of seriously mentally ill patients in mainstream programs was nearly three times the proportion in ethnicityspecific programs (41% vs 14%; P < .001). The data on psychiatric diagnoses must be interpreted with caution since the data set did not permit us to evaluate the comparability of assessments conducted in ethnicity-specific and mainstream programs. It is equally plausible that therapists in ethnicity-specific programs may be less inclined to diagnose ethnic consumers with a psychotic disorder. The data also suggested the importance of controlling for these factors in comparing program effects in subsequent analyses.

Table 1 also shows the overlap between ethnicity-specific programs and the matching of clients and therapists on the basis of ethnicity. Ethnicity-specific programs for each group were associated with significantly more client-therapist matches in ethnicity than were mainstream programs. Matching occurred substantially more in African American and Asian American ethnicity-specific programs than in Mexican American programs. African Americans in ethnic programs were four times more likely than African Americans in mainstream programs to see an African American therapist (70% vs 17%). The likelihood of match was even greater among Asian American programs, in which matching occurred 6.6 times more often than in mainstream programs. While matching was significantly higher in ethnicityspecific than in mainstream facilities for Mexican Americans, the difference was less pronounced than in the case of the other two ethnic minority groups.

#### Return Rate

Continuation was defined as return for treatment after one session. Sixty percent of African Americans in mainstream programs and 77% in ethnicityspecific programs returned after one session ( $\chi^2 = 52.71, df = 1$ ). Among Asian Americans, 64% in mainstream programs and 98% in ethnicity-specific programs returned after one session ( $\chi^2 = 261.11$ , df = 1). Finally, among Mexican Americans, 68% in mainstream programs and 97% in ethnicity-specific programs returned after one session ( $\chi^2 = 112.93$ , df = 1). The difference in return rate between mainstream and ethnicityspecific programs within each minority group was statistically significant (P < .001). Since adults who entered mainstream and ethnicity-specific programs differed in some demographic and clinical characteristics, we conducted multiple logistic regression analyses to determine whether these initial differences remained after selected factors had been controlled.

Table 2 displays the effects of ethnicity-specific programs for each ethnic minority group (expressed as odds ratios). Each model controlled for the client's gender, age, psychiatric disorder, Medi-Cal eligibility, and ethnic match. Adults who entered ethnicity-specific programs were more likely to return after one session than adults in mainstream programs when other factors were controlled. The most substantive differences between programs occurred among Asian Americans and Mexican Americans. Asian Americans who entered ethnic programs were nearly 15 times (95% confidence interval [CI] = 7.8, 27.4) more likely than Asian Americans in mainstream programs to return after the first session. Mexican Americans were 11 times (95% CI = 6.1, 21.3) more likely to return if they were in ethnicity-specific programs rather than mainstream programs.

We should note that the effects for continuation in treatment were independent of the year in which data were collected. Since our study data span several years, the results may be an artifact of changes in the mental health system over time. We controlled for time and did not find any substantive changes in the results. Similarly, we examined the effect of time on the remainder of our dependent measures and found no major changes in our conclusions.

TABLE 2—Odds Ratios Derived from Multiple Logistic Regression Assessing the Effects of Ethnicity-Specific Programs on Return after One Session

	Odds Ratio (95% Confidence Interval)				
Type of Program	African Americans	Asian Americans	Mexican Americans		
Ethnicity specific	2.88 (2.2, 3.8)	14.63 (7.8, 27.4)	11.32 (6.1, 21.3)		
Mainstream (comparison)	1.00 ′	1.00	1.00		

TABLE 3—Standardized Multiple Regression Coefficients Estimating the Effects of Ethnicity-Specific Programs on the Log of Total Number of Sessions

	African Americans (n = 1516)	Asian Americans (n = 1888)	Mexican Americans (n = 1306)
Ethnicity-specific	.14*	.29*	.28*
program Adjusted R <sup>2</sup>	.08	.22	.15

Note. All models controlled for gender, age, disorder, ethnic match, and Medi-Cal eligibility.  $^*P \leq .001$ .

# Length of Treatment

Longer amounts of time spent in mental health treatment settings have typically been associated with better outcomes.<sup>27,28</sup> Thus, the longer the client stays in the program, the greater the probability that treatment will be successful. Length of treatment was measured by the total number of sessions that the client attended. Since the raw means for the different programs were quite unstable as a result of the wide range in number of client sessions in the different programs, the log of the total number of sessions was used in the remainder of the analyses. Table 3 reveals the standardized multiple regression coefficients estimating the effects of program type on length of stay for each minority group. Ethnic programs for the three minority groups were associated with a significantly greater number of treatment sessions after other variables had been controlled.

#### Global Assessment Scale Scores

The Global Assessment Scale score at discharge was the only available treatment outcome measure. Since minority clients in ethnic programs had an initially higher social functioning level than minority clients in mainstream programs, the admission score was added as a control variable in the remaining analyses of the

discharge score. The effect of ethnicityspecific programs was evident only for African Americans. African Americans who entered ethnicity-specific programs had lower mean scores than African Americans in mainstream programs when other factors were controlled (data not presented).

#### Ethnic Programs and Ethnic Match

Since program type and ethnic match were highly correlated, there is the possibility that the relationships between these variables and the dependent measures were not additive. To understand these issues more clearly, we examined the interaction between program and ethnic match after controlling for other sociodemographic and clinical factors. The intent of the subsequent analyses was to ascertain whether there was a synergistic effect of ethnic match and program on our dependent measures. In this section, we present the results for continuation after one session and length of treatment (see Table 4). The results for discharge Global Assessment Scale score did not show a consistent pattern for any of the ethnic groups.

The baseline or comparison group in these analyses consisted of minorities who entered mainstream programs and were not matched with their therapists. In

TABLE 4—Estimated Effects of Ethnicity-Specific Programs and Ethnic Match on Return Rate and Total Number of Sessions

	Premature Termination, OR (95% CI)			Treatment Sessions, Standardized Beta		
	African Americans	Asian Americans	Mexican Americans	African Americans	Asian Americans	Mexican Americans
Ethnic program, client-therapist match	1.94 (1.5, 2.5)	43.62 (19.3, 99.5)	9.47 (4.62, 19.5)	.12**	.41**	.24**
Ethnic, no match	2.16 (1.5, 3.2)	22.34 (9.1, 55.2)	16.85 (5.3, 53.5)	.06*	.28**	.22**
Mainstream, client– therapist match	.45 (0.29, 0.69)	6.32 (3.35, 11.82)	1.04 (0.76, 1.42)	08	.21**	.04
Mainstream, no match (comparison)	1.00	1.00	1.00			

Note. All models controlled for gender, age, disorder, and Medi-Cal eligibility. OR = odds ratio; CI = confidence interval.  $*P \le .05$ ;  $**P \le .001$ .

Table 4, the results for return rates are presented as odds ratios. Ethnicity-specific programs were associated with higher return rates for all three minority groups, whether or not clients were ethnically matched with their therapists. When minority clients entered mainstream programs but were matched with their therapists, the results were mixed. Only Asian Americans who were matched with an Asian therapist returned more often than their counterparts in mainstream programs who were not matched.

Table 4 also displays the interactive effect of program and match on the log of the total number of treatment sessions (values are standardized regression coefficients). The results were quite striking in that ethnicity-specific programs alone, match alone, or a combination of both were significantly associated with a higher number of treatment sessions for Asian Americans. African Americans and Mexican Americans who entered ethnicity-specific programs, regardless of match, were likely to stay longer than African Americans and Mexican Americans in mainstream programs.

## Discussion

This study used data supplied by a large management information system derived from naturalistic settings. Since these data were not part of an experimental design, it was not possible to control for a number of factors that could have influenced the results. For example, it is plausible that therapists in ethnicity-specific clinics diagnose patients differently than therapists in predominantly White clinics. Also, clients who enter ethnicity-specific centers may differ from clients who enter predominantly White

clinics on a number of dimensions that we were unable to measure in the present study. Despite this general limitation, we believe that the data set provided a propitious opportunity to address how well programs serve ethnic minority consumers and to point to future directions for examination of this issue in more rigorous research designs.

Previous findings have documented that ethnic minorities often lack access to appropriate mental health services. 15,18 The present study provides initial documentation on ethnic minority clients who enter ethnicity-specific programs. In general, the results indicate that ethnic clients involved in such programs return more often and stay for more sessions than those involved in mainstream programs. The effect of program on length of treatment persisted even after differences in client variables and ethnic matching of clients and therapists in the two types of programs had been controlled. The advantage of ethnicity-specific programs over mainstream programs was not maintained when the Global Assessment Scale termination score, the measure of outcome. was used as the criterion and other factors were controlled. It is possible that the Global Assessment Scale, which requires a numerical rating of overall functioning, is a poor or insensitive measure of treatment outcome and that the ratings resulting from this scale, which were determined by the therapist, may have been affected by his or her own involvement in the case and the presence or absence of client-therapist ethnic match. Certainly one limitation of the present study was not having several different outcome measures, and there is a clear need to develop better outcome measures for cultural interventions.

In the present study, it was not possible to identify the precise aspects of ethnicity-specific programs that may explain the findings. Policymakers and social scientists have a critical stake in identifying such elements. First, in light of the growing efforts to change the health care system, there is little empirical basis with which to guide modifications and policies for the delivery of mental health care to ethnic minority groups. Despite conceptual notions about the components of ethnicity-specific services, it is unclear, at this point, what actually constitutes these services. Second, it is highly unlikely that all characteristics of ethnicity-specific services influence use. Anecdotal and observational evidence has suggested that some of the characteristics include having bilingual and bicultural staff, providing an ethnic atmosphere at the agency, having announcements written in ethnic languages, conducting treatment in a more "culturally sensitive" manner, changing hours of operation of the agency, and using culturally appropriate interpersonal styles. Third, it is likely that ethnicityspecific programs are more attractive to certain segments of ethnic minority communities. For example, recent immigrants may find ethnicity-specific programs appealing because these programs have a high number of staff who can communicate with them. Without more systematic investigations of these and other characteristics associated with ethnicity-specific programs, contributions to theory cannot emerge. What components of ethnicityspecific services result in higher use rates, reduced premature termination, more favorable attitudes toward treatment, and, ultimately, better client outcomes? By investigating ethnicity-specific services, we can gain insight into the means for improving not only these services but mainstream ones. Given the increasingly multiethnic nature of our society, mainstream services will need to become more responsive to the cultural needs of ethnic clients. Moreover, it is likely that certain components of effective services for ethnic communities will translate to mainstream populations. From our perspective, analysis of ethnicity-specific services is an essential and exciting area of investigation that has been almost completely ignored, despite much discussion about the need for such services.

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